JUNE 20, 1983 THREE DOLLARS

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Forbes

THE BRAVE NEW WORLD OF SOFTWARE PROGRAMMERS

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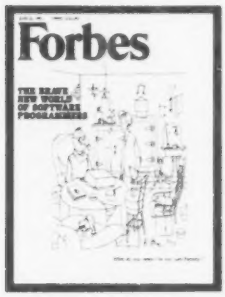
"What do you mean I'm not 'user-friendly'?"

June 20, 1983
Volume 131,
Number 13



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not only for today, but next year as well.

"In addition, we're willing to give utilities greater flexibility through a flat monthly fee, plus a fixed transportation charge per ton of coal moved, regardless of where they buy their coal on Conrail."

"We control every car with one of the most sophisticated computer data centers in the U.S."

"You could have the most competitive rate and it wouldn't mean a darned thing nowadays if you didn't have the most timely data processing information available to tell you where your car is at any time, and any place on our system. You get them both with Conrail.

"You also get a completely computerized system designed to control car supply based on your forecasts of your needs. As a result, when you call your local car reservation clerk, you're sure to get your car when you want it, where you want it.

"Furthermore, our marketing experts can use our extensive information system to quickly analyze various rate, equipment and service combinations and give you the information you need to respond to today's rapidly changing marketplace."

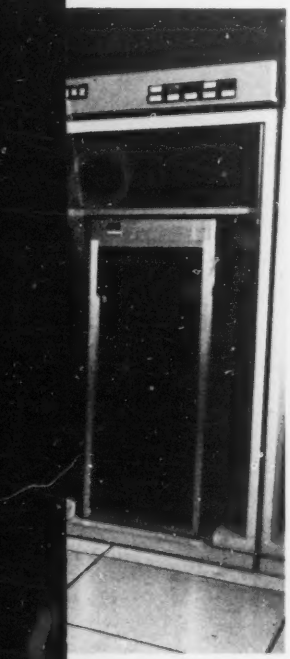
"Our labor unions are helping us to be more competitive."

"We've entered into a new era of cooperation with our labor unions. They have given us the kind of flexibility that leads to great service, such as Conrail's new Mini-train for General Motors.

"GM required overnight service from Kalamazoo, Mich., where auto parts are consolidated, to Fisher Body and Oldsmobile in Lansing, 118 miles away. To eliminate stocking inventory at the plant, GM required that the parts be delivered "just in time" for the first morning shift—not early, not late.

"Auto parts that once moved by truck are now handled by Conrail *overnight*.

"One very big reason behind our ability to adapt to the needs of GM, in addition to our price and service package, is an agreement by Conrail's labor unions to improve productivity on the Mini-train by eliminating a crew change stop. Productivity improvements such as this are the key to making us more competitive in today's deregulated marketplace."



Kalamazoo, 6 p.m.: *Conrail Mini-train leaves for Lansing with auto parts needed by GM for next day's auto production.*

Lansing, 6 a.m.: *Monday through Friday, parts shipped overnight by Conrail Mini-train already placed on GM's dock before start of first shift.*

"For the second year in a row, Conrail has been profitable."

"Conrail showed a $39 million operating profit in 1982. This financial performance, I'm pleased to say, is even better than our 1981 record, which was one of the most dramatic improvements in American corporate history!

"REASON: Conrail can now make price and cost decisions like any other business—and do it in a rapidly changing economy.

"We look forward to continuing this progress in 1983. We have a plant that is in superb physical condition. Our tie and rail renewals are up to snuff. The supply of cars and locomotives is the best ever. And to ensure continued good service at low cost in the future, we just ordered 100 very efficient new locomotives.

"At Conrail, we have a modern freight transportation system that is second to none."

"If you have a problem, please write to me."

"Last year, we promised you competitive prices, innovative service and on-time delivery. What you just read demonstrates how seriously we took our commitment. And I promise you more of the same this year. But if we ever fail to live up to this promise, I want to know about it *personally*.

"Write to me at 6 Penn Center Plaza, Room 1040C, Philadelphia, PA 19104.

"I'm fighting to get your business—and I'll fight to *keep* it."

L. Stanley Crane

Send coupon for more information, including a free "Shipper's Information Kit" (revised for 1983) with tips on how to get the most out of Conrail's services.

FB620

Mr. L. Stanley Crane
Chairman and CEO
Conrail, Room 1040C
6 Penn Center Plaza
Philadelphia, PA 19104

Please send the "Shipper's Information Kit" and other materials that will help my business.

Name_____

Firm_____

Address_____

City_____

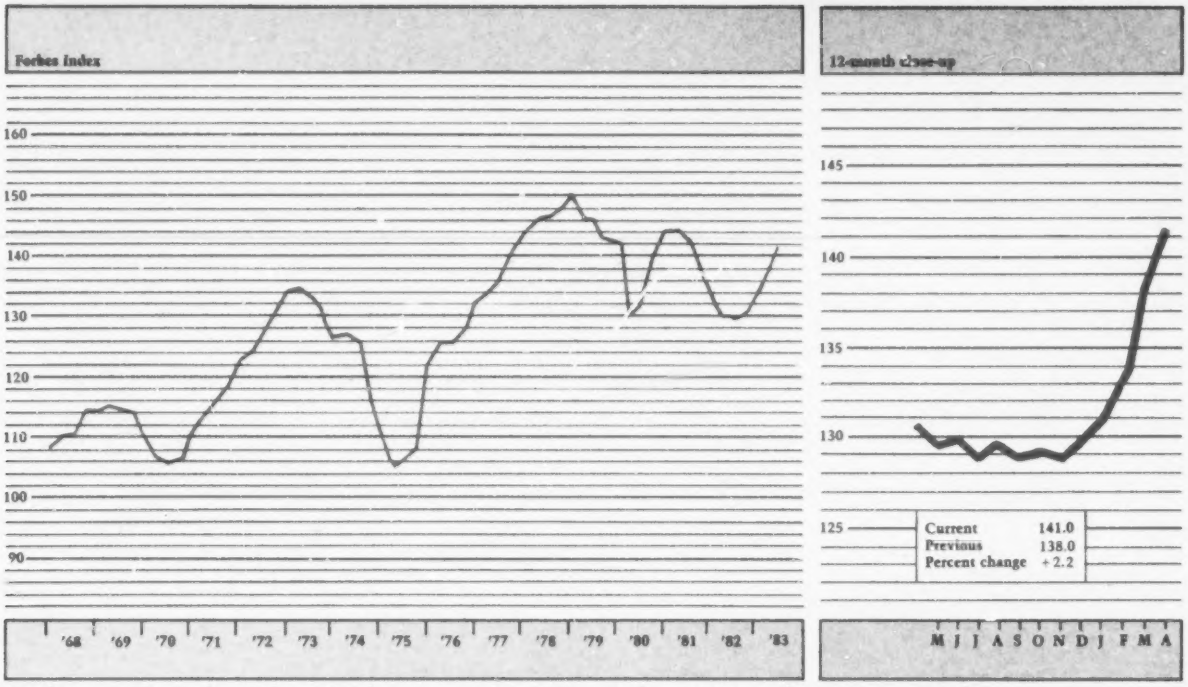
State_____ Zip_____

Phone_____

CONRAIL

"We've got to be competitive."

The Forbes Index



Moving up. The Forbes Index posted an impressive 2.2% rise, matching a similar increase in the previous reporting period.

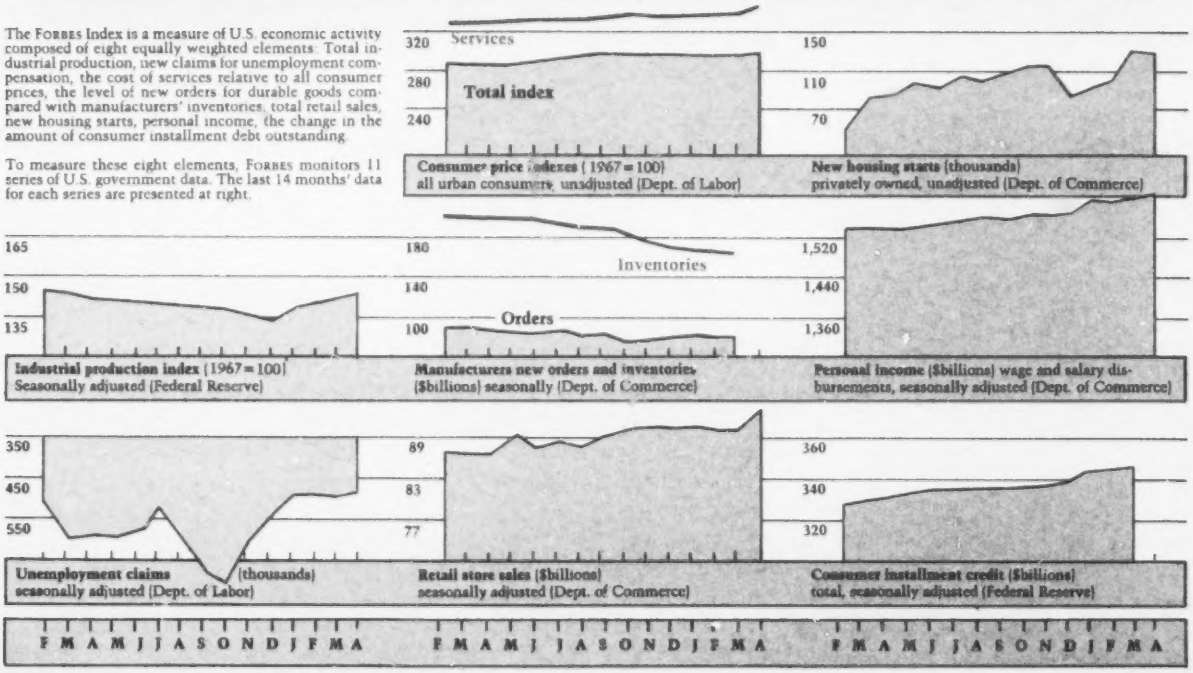
The willingness of consumers to spend was a major reason for the increase. Consumers have money in their pockets because personal income was up 0.8% in April, following a 0.6% jump in March. At the same time, initial unemployment claims dropped 2.0% in April, compared with a 1.4% rise the previous month.

Inflation remains under control. The Consumer Price Index rose 0.7% during the latest reporting period, but much of that is attributable to a new gasoline tax. The service sector index increased 0.5% against a 0.1% rise a month earlier. New housing starts were off slightly. The 1.7% dip is deceiving, however, because it follows the unusually high increases in the first quarter of the year.

The Forbes Index Components

The Forbes Index is a measure of U.S. economic activity composed of eight equally weighted elements: Total industrial production, new claims for unemployment compensation, the cost of services relative to all consumer prices, the level of new orders for durable goods compared with manufacturers' inventories, total retail sales, new housing starts, personal income, the change in the amount of consumer installment debt outstanding.

To measure these eight elements, Forbes monitors 11 series of U.S. government data. The last 14 months' data for each series are presented at right.



Everyone wants a piece of the overnight courier business—even Purolator, the biggest competitor of all.

Attack of the invisible giant

By Jeff Blyskal

WHAT'S WRONG with this picture? Three men carrying red, blue and purple parcels are running a footrace in the desert. Suddenly, number three breaks ahead of number two. Airborne Freight, we are told, has just passed Emery in the overnight air express race. Federal Express remains number one.

Missing is a courier from Purolator—a low-profile, New Jersey-based company that may be more familiar to your auto mechanic than to your broker. Fifteen years ago it only manufactured filters for motor vehicles, but now Purolator also moves at least 50% more express delivery packages door-to-door than anyone else.

In 1982 three-fourths of Purolator's $750 million in sales and $68 million in operating profit came from courier and armored car services. Purolator's 25% return on equity just tops Federal Express'. Federal's dollar sales are bigger and have grown faster, but Purolator is working to close the gap.

Last February the company moved more aggressively into document transportation by introducing its 2-ounce PuroLetter and by transforming its Hiway Pak and Sky Pak into the 2-pound PuroPak. This is in large part the work of William Waltrip, who left Pan American for Purolator last July. At 45, he is heir apparent to 67-year-old Frederick Cook, who has been chairman since 1982. Waltrip, known as a gregarious, effective executive at Pan Am, brings a fresh competitive spirit to Purolator.

Nowhere is this more evident than in documents. As of Mar. 1, Purolator was moving 6,000 PuroLetters a night (one-seventh of Federal's letter volume) and an estimated 32,000 PuroPaks (half of Federal's similar overnight envelope volume). Outsiders expect the company's document business to double by next year.

A Purolator courier and Chief Executive William Waltrip
Why fly when you can drive?

4,368,466 – DISPLAY REFRESH MEMORY WITH VARIABLE LINE START ADDRESSING – 1/11/83

4,368,220 – PASSIVATION OF RIE PATTERNED AL-BASED ALLOY FILMS BY ETCHING TO REMOVE CONTAMINANTS AND SURFACE OXIDE FOLLOWED BY OXIDATION – 1/11/83

4,367,947 – DOCUMENT FEE MOVING BED MACHINES SU COPIERS – 1/11/83

4,367,549 – METHOD AND A FOR MULTIPLEXING A DAT AND SECONDARY SIGNALS

4,367,503 – HERMETICALLY DISK FILE – 1/4/83

4,367,119 – PLANAR MULTI-L METAL PROCESS WITH BU STOP – 1/4/83

4,367,052 – FLAT RATE SPRI PARTICULARLY ADAPTED TYPEWRITER CARTRIDGE

4,367,044 – SITU RATE AND MONITOR FOR SILICON ETCHING – 1/4/83

4,366,613 – METHOD OF FA AN MOS DYNAMIC RAM WI DOPED DRAIN – 1/4/83

4,366,540 – CYCLE CONTRO MICROPROCESSOR WITH MULTI-SPEED CONTROL STORES – 12/28/82

4,366,537 – AUTHORIZATIO MECHANISM FOR TRANSFE PROGRAM CONTROL OR BETWEEN DIFFERENT AD SPACES H G DIFFEREN PROTECT YS – 12/28/82

4,366,518 – MULTI-TRACK H ASSEMBLY – 12/28/82

4,366,493 – SEMICONDUCTO BALLISTIC TRANSPORT DEVICE – 12/28/82

4,365,779 – TILT AND ROTAT APPARATUS A DISPLA MONITOR – 12/ 82

4,365,318 – TWO-SPEED RECIRCULATING MEMORY USING PARTIALLY GOOD COMPONENTS – 12/21/82

4,365,317 – SUPERCONDUCT CIRCUIT – 12/21/82

4,365,296 – SYSTEM FOR CONTROLLING THE DURA THE TIME INTERVAL BETW BLOCKS OF DATA IN A CO TO-COMPUTER COMMUNI SYSTEM – 12/21/82

4,365,235 – CHINESE/KANJI RECOGNITION SYSTEM – 12

4,365,163 – PATTERN INSPE TOOL – METHOD AND APPARATUS – 12/21/82

4,364,683 – PAPER FEED RO ASSEMBLY FOR A TYPEWR PRINTER – 12/21/82

4,364,166 – SEMICONDUCTO INTEGRATED CIRCUIT INTERCONNECTIONS – 12/

4,364,100 – MULTI-LAYERED METALLIZED SILICON MAT SUBSTRATE – 12/14/82

4,364,074 – V-MOS DEVICE WITH SELF-ALIGNED MULTIPLE ELECTRODES – 12/14/82

4,364,024 – SIGNATURE PRESENTATION METHOD AND APPARATUS – 12/14/82

4,363,989 – HETEROFULVALENE GEMINAL DITHIOLATE COMPOUNDS AND THEIR SELENIUM AND TELLURIUM ANALOGS AND A METHOD OF FABRICATING THE SAME – 12/14/82

4,363,828 – METHOD FOR DEPOSITING SILICON FILMS AND RELATED MATERIALS BY A GLOW DISCHARGE

4,363,549 – ELECTROMECHANICALLY OPERATED FUSER ROLL CLOSURE – 12/14/82

4,363,125 – MEMORY READBACK CHECK METHOD AND APPARATUS – 12/7/82

4,363,124 – RECIRCULATING LOOP MEMORY ARRAY TESTER – 12/7/82

4,363,110 – NON-VOLATILE DYNAMIC RAM CELL – 12/7/82

4,363,093 – PROCESSOR INTERCOMMUNICATION SYSTEM – 12/7/82

4,363,044 – TRAY FOR MAGNETIC DISK DRIVE MACHINE – 12/7/82

4,362,977 – METHOD AND APPARATUS FOR CALIBRATING A ROBOT TO COMPENSATE FOR INACCURACY OF THE ROBOT – 12/7/82

4,362,843 – PROCESS FOR PRODUCING A POLYMERIZED, HEAT-RESISTANT LACQUER – 12/7/82

4,362,798 – HYDRAZONE AND PYRAZOLINE OR ACETOSOL YELLOW CONTAINING CHARGE TRANSPORT LAYER PHOTOCONDUCTOR AND ELECTROPHOTOGRAPHIC PROCESS

AND THEIR SELENIUM AND TELLURIUM ANALOGS AND A METHOD OF FABRICATING THE SAME – 12/7/82

4,362,611 – QUADRUPOLE R.F. SPUTTERING SYSTEM HAVING AN ANODE/CATHODE SHIELD AND A FLOATING TARGET SHIELD – 12/7/82

U.S. Patent 4,382,286 was one of four issued to IBM on Tuesday, May 3. This invention reduces the time for transmitting an image from a computer's central processing unit to its display unit.

But as the latest addition to this partial list of IBM achievements in technology and science, it represents something larger: the creativity of IBM inventors.

Over the last 25 years, they've been granted more than 11,000 patents.

Their innovations and discoveries helped IBM make contributions to all aspects of the information processing industry—from typewriters to our largest computers.

For instance, our most advanced disk file transfers data at 3 million characters per second, the fastest rate available in a production unit. Our experimental 288,000-bit memory chip has the largest capacity yet reported for a chip produced on a manufacturing line. And the circuit packaging in our larger computers is the densest in the industry.

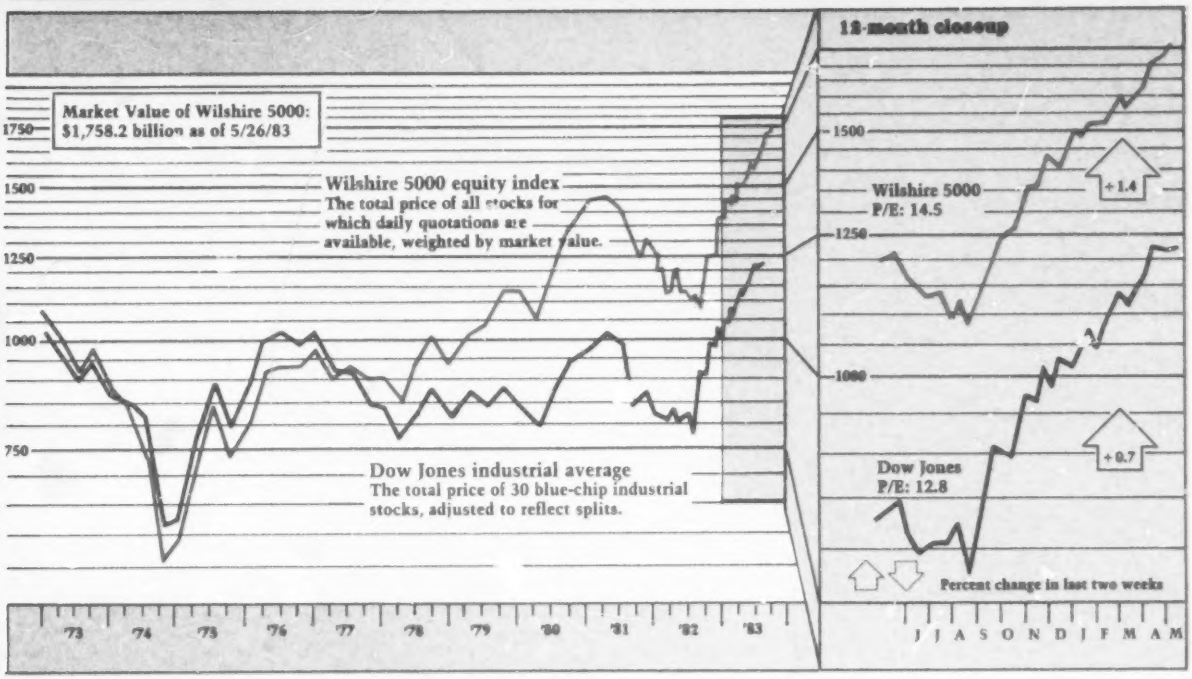
Each achievement, no matter how small (or how large), contributes to making IBM products faster, less expensive, easier to use and more reliable.

It's all part of IBM's worldwide commitment to research and development.

And that's the patent truth.

IBM

The Forbes/Wilshire 5000 Review



When will it stop? Trading volume has begun to pick up strength. Despite the increasing activity, however, the Dow stayed virtually flat over the last four weeks. With the shares of many mature blue chip firms already pushed to high levels and Uncle Sam waiting in the wings for his share of capital gains, many investors are risking some of their newfound profits in "concept" stocks. Low-priced shares, perhaps because of their inherent leverage, have become big favorites: Over the last four weeks issues trading below $4 gained 18.1%, while their higher-priced counterparts advanced 4.4%. Small firms, up 18.5%, high-growth companies, up 16.3%, and high volatility issues, up 14.9%, were also in vogue.

The major indexes reflect Wall Street's speculative atmosphere. During the last month the Dow industrials gained only 0.3%, and the NYSE was up 2.3%. NASDAQ and Amex issues, meanwhile, advanced 7.1% and 9.5%, respectively. The Wilshire index—including almost 5,000 securities for which price quotes are available—shows that the market as a whole moved ahead 3.2%. This translates into an increase in market value of more than $70 billion. And the P/E of the Wilshire, now 14.5, is at its highest level since FORBES began tracking this figure late last year.

Close-up On The Equity Markets

Performance of six leading indexes

Percent change	Wilshire 5000	Forbes 500[1]	Dow Jones Industrials	NYSE Composite	Amex Market Value Index	NASDAQ Composite
in last 4 weeks	3.2	1.5	0.3	2.3	9.5	7.1
in last 52 weeks	51.1	46.2	48.3	47.5	74.4	74.6

Stock performance based on five key investor yardsticks

Percent change	Company size		Volatility[2]		P/E multiple		Dividend yield		Growth profile[3]		Share price	
	large	small	high	low	over 25	under 5	over 7.5%	none	high	low	over $40	under $4
in last 4 weeks	4.4	18.5	14.9	5.8	12.7	13.4	4.7	14.6	16.3	4.1	4.4	18.1
in last 52 weeks	54.0	140.7	133.9	57.0	96.4	144.6	49.1	143.9	146.9	58.3	67.1	131.3

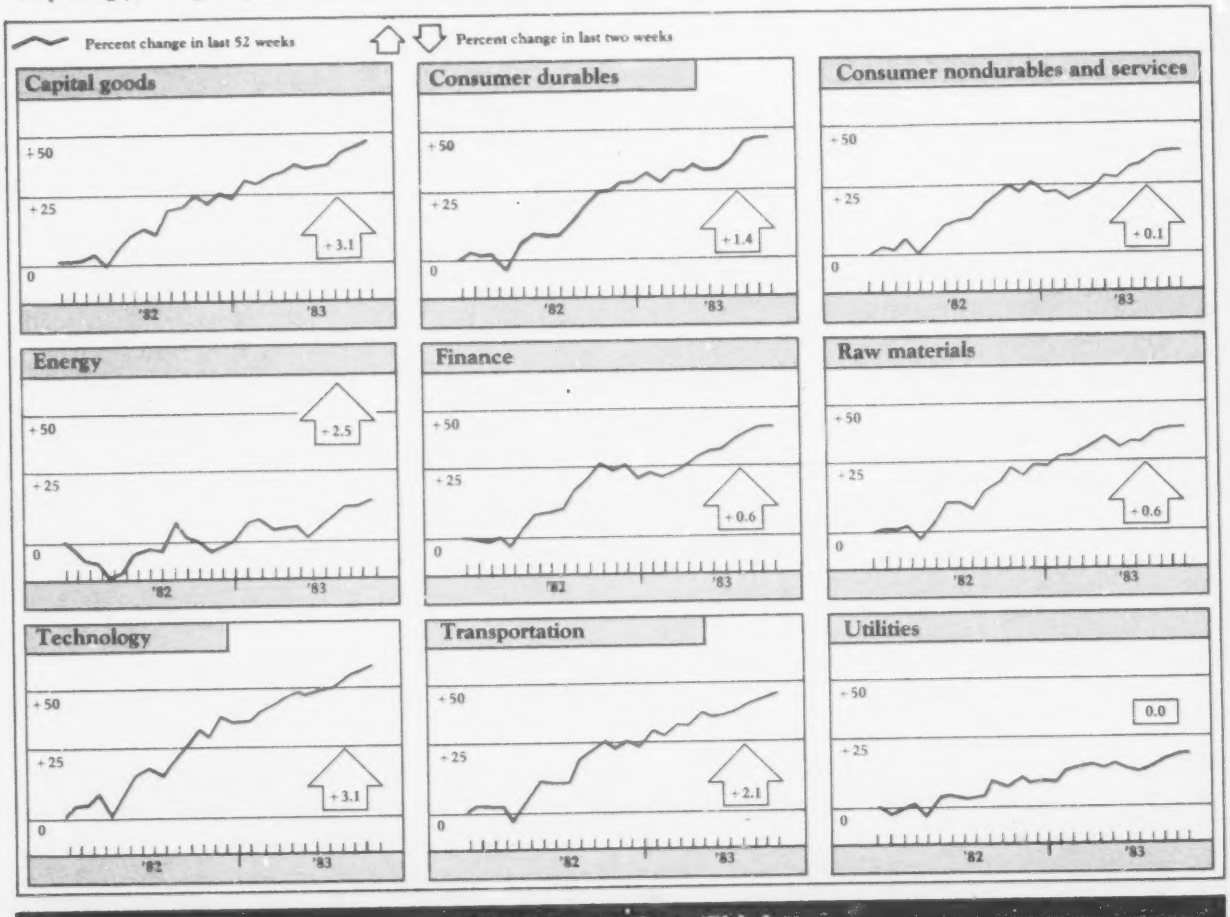
[1]Based on sales.
[2]A stock's sensitivity to overall market movement. High-volatility issues have wide price fluctuations, low-volatility issues are more stable.
[3]A quantitative evaluation of a stock's growth image, determined by Wilshire Associates.

Note: All data for periods ending 5/26/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Where The Action Is

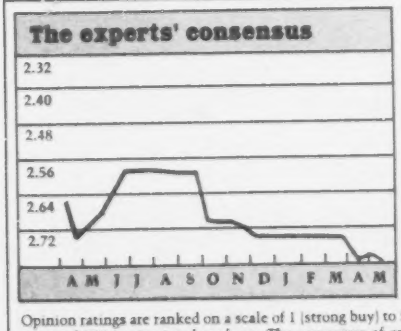
Emotional rescue. Investors kept betting on a recovery by buying into capital goods, transportation, energy, consumer durables and technology. But the strength of the oils was even more impressive. During the last two weeks they advanced 2.5%. This gain was undoubtedly supported by Diamond Shamrock's tender offer for Natomas. Not surprisingly, merger speculation also helped push up a number of other energy issues. Once again investors got a reminder of the potential undervaluation of this group—especially compared with the rest of the market.

The strongest groups were capital goods and technology. Technology stocks also show the greatest 52-week gain, 87.7%, whereas energy issues lag with only a 17.3% advance.



What The Analysts Think

Standing by their guns. It has been more than four weeks since there has been a change in analyst buy/sell rankings of the nine Wilshire sectors. The analysts' top choice—utilities—has been a market laggard since early March. But third- and fourth-ranked capital goods and technology led the market during the last two weeks.



Rank	Sector	Current opinion	Rank 2 weeks ago	Rank 4 weeks ago
1	Utilities	2.63	1	1
2	Energy	2.73	2	2
3	Capital Goods	2.78	3	4
4	Technology	2.79	4	3
5	Raw materials	2.79	5	5
6	Finance	2.82	6	6
7	Transportation	2.86	7	7
8	Consumer nondurables	2.87	8	8
9	Consumer durables	2.92	9	9

Opinion ratings are ranked on a scale of 1 (strong buy) to 5 (strong sell). Data reflect the views of 200 institutional analysts. The consensus of opinion graph is the composite rating of 1,200 stocks, while the sector breakdowns correspond to industry groups graphed above. All figures are weighted for market capitalization.

Note: All data for periods ending 5/26/83. Prepared by Wilshire Associates, Santa Monica, Calif.

Take a struggling firm, dilute future earnings by offering millions of new shares, and what happens? The stock shoots upward.

Do you believe in magic?

By Paul Bornstein

On Feb. 25, Chrysler registered an offering of 10 million new shares and the market didn't even flinch. On the contrary, Chrysler stock went from 14⅞ the day after registration to 16⅝ on the offering date. Not only that, the demand was so great that the firm unloaded 26 million rather than the 10 million shares originally announced. Four weeks later Chrysler was up almost 55%.

American Motors turned the same trick. An enlarged offering on Apr. 12 was quickly sold out at 5⅞. AMC's total offering diluted the stock by 44% and The Street doesn't expect the company to return to profitability until 1985. Despite that fact, four weeks later the stock was ahead almost 79%.

Traditionally, mere word of a large new equity financing is enough to depress a stock (the new supply overhangs the market), even though the proceeds from the offering are often used to pay off debt or finance new projects. But in this emotion-filled bull market, tradition—bearish tradition, anyway—doesn't hold.

Forbes found 57 companies that used public offerings in March or April to increase their shares outstanding by 10% or more. The first group in the table below shows ten firms with the greatest upward movement four weeks after the offering date.

Altogether, about half of the 57 were at higher prices on offering day than they were on the day they registered their new issue (roughly when it becomes public knowledge). It is true that many did fall briefly the next market day, but the majority quickly recovered from there. Seventeen actually rose the next day on the news.

The second group shows how strong even the stocks that did decline were after the offering. The top five gainers are listed.

The last column in the table, "Movement relative to S&P's 500," relates stock price to market from the day after registration to four weeks after the offering. You can see how enthusiastically investors received the news that big, fresh supplies of shares were around. Health services firm Comprehensive Care, the champ in this category, outperformed the S&P's 500 by an 18.5-to-1 margin.

With this kind of frenzy in the secondary-issue marketplace, it is not hard to see why more and more firms are jumping in. Would cash-hungry Ford be far behind AMC or Chrysler if you were in charge? ■

Another bull story

Of the 15 stocks below, 14 were in such demand that they outperformed the S&P's 500 by a wide margin despite significant dilution from new equity offerings. The average relative gain was 5.4-to-1. Note that the first 10 issues even showed gains from the day after registration to the day of the public offering.

Company	Business	Date common registered	Date common offered	Common stock price: day after registration	Common stock price: at offering	Common stock price: 4 weeks after offering	% change from offering date	Shares offered (thousands)	Existent stock dilution	Movement relative to S&P's 500*
Group I										
American Motors	automotive	3/23	4/12	5⅞	5⅞	10½	78.7%	24,785	44%	9.5
Chrysler	automotive	2/25	3/29	14⅞	16⅝	25¾	54.9	26,000	33	7.9
Applied Materials	semicond equip	3/31	4/8	29¾	30¼	39¾	31.4	560	10	3.8
North Atl Inds	electronics	3/21	4/12	12⅛	14	17⅞	27.7	375	21	4.4
Airborne Freight	freight forwarding	3/31	4/15	19¼	20⅛	25¼	25.5	900	19	3.4
Dayton Malleable	metal casting	3/28	4/21	24	26¼	32¾	24.8	1,300	67	5.3
Telesphere Intl	hotel phone acct sys	3/31	4/20	15⅛	15¾	19½	23.8	2,000	26	4.1
Orion Pictures	entertainment	2/9	3/31	18¼	19½	24	23.1	2,000	29	3.0
Standard Logic	computer equip	2/7	3/24	4⅜	5	6⅛	22.5	1,250	36	3.9
Genetic Systems	medical research	3/11	4/7	9¾	9⅞	12	21.5	2,220	16	2.6
Group II										
Manage Sci Am	computer software	3/30	4/14	23	21	29¼	41.7	2,500	18	4.0
CompCare	health care svcs	4/15	4/21	29	28	36½	30.4	1,300	13	18.5
UTL	electronics	3/31	4/20	37	33½	43¼	29.1	450	24	2.4
Lockheed	aerospace	3/18	3/23	97½	95	116½	22.6	3,000	17	3.1
Possis Corp	machinery	3/7	4/19	11¼	8¾	10½	20.0	275	20	neg

*Stock movement from day after registration date to four weeks after offering date, relative to performance of the S&P's 500. neg: negative.

Sources: Wilshire Associates; Standard & Poor's; Forbes.

NOTE

ONLY THE FOLLOWING PAGES OF THIS

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